RESUBMITTAL (

OCD-ARTESIA

Form 3160-3 (April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Month From Jan 12 (2017) OCD - ARTESIA, NM FORM APPROVED OMB No. 1004-0137 Expires March 31, 2007

If Indian, Allotee or Tribe Name

Lease Serial No. NMLC 069627-A

APPLICATION FOR PERMIT TO DRILL OR REENTER

AFFEIGATION FOR FERMIT IN	J DRILL ON HELITICA			
la. Type of work: DRILL REEN	ITER		7. If Unit or CA Agreement, NMNM 71016	Name and No.
lb. Type of Well: Oil Well Gas Well Other	Single Zone Multi	ple Zone	8. Lease Name and Well N Poker Lake Unit #2:	1711
2. Name of Operator BEPCO, L. P. 1801			9. API Well No.	3564
3a. Address P. O. Box 2760	3b. Phone No. (include area code)		10. Field and Pool, or Explora	atory
Midland, TX 79702	432-683-2277		Nash Draw (Dela, B	S, Avalon Sd)
4. Location of Well (Report location clearly and in accordance with	arty State requirements.*)		11. Sec., T. R. M. or Blk. and	Survey or Area
. It surface	FEL, Lat N32.180306, Lon W103.9 TROLLED WATER BASI		Sec 31, T24S, R30E,	MER NMP
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State
14 Miles East of Malaga, NM			Eddy County	NM
15. Distance from proposed* location to nearest 330'	16. No. of acres in lease	17. Spacin	g Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig, unit line, if any)	1922	40		
18. Distance from proposed location*	19. Proposed Depth	20. BLM/	BIA Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft.	7600' MD / 7600' TVD	NM 2	204	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22 Approximate date work will sta	art*	23. Estimated duration	
3187' GL	04/01/2008		12 days	
	24. Attachments			
The following, completed in accordance with the requirements of Ons	hore Oil and Gas Order No.1, shall be a	attached to th	is form:	
·				

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- 5. Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25 Signature Children	Name (Printed/Typed) Annette Childers	Date 4-19-2001
Title		

Administrative Assistant

Approved by (Signature)

Stephen 5 Castey

Title FIELD MANAGER

Name (Printed/Typed)

BLM-CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT I 1626 N. French Dr., Hobbs, NM 86240 DISTRICT II 1301 V. Grand Avenue, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 67605 OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Na	Pool Name			
	47545	Nash Draw (Delaware, Bone Spring, Avalor				
Property Code		Property Name	Well Number			
001796	PO	KER LAKE UNIT	234			
OGRID No.		Operator Name	Elevation			
001801		BEPCO, L.P.	3187'			

Surface Location

UL or lot No.	Section	Township	Range Lot Idn Feet		Feet from the	North/South line	Feet from the	East/West line	County
В	31	24 S	30 E		330	NORTH	2400	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	onsolidation (Code Or	der No.			: 	
40	N								,

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OR A NON-STAN	DARD UNIT HAS BEEN APPROVED BY	THE DIVISION
LOT 1 40.65 ACRES	3201.5" 3179.7" 81.32 ACRES	31/2.5' LAT - N3/2'10'49.1" LONG - W108'55'11.5" 162.34 ACRES	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
40.61 ACRES			Refer to original plat Printed Name SURVEYOR CERTIFICATION
LOT 3 40.57 ACRES	81.16 ACRES	162.66 ACRES	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief. MARCH 12 2005 Date Survey of L. Signatury & Sent Mark Professional Surveyor Company of the surveyor Company of
<u></u>	1		BASIN SURVEYS

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

State of New Mexico

Form C-102 Revised March 17, 1999

DISTRICT II 511 South First, Artesia, NM 88210 Energy, Minerals and Natural Resources Department

Submit to Appropriate District Office

PROFESSIONAL LAND

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
2040 South Pacheco

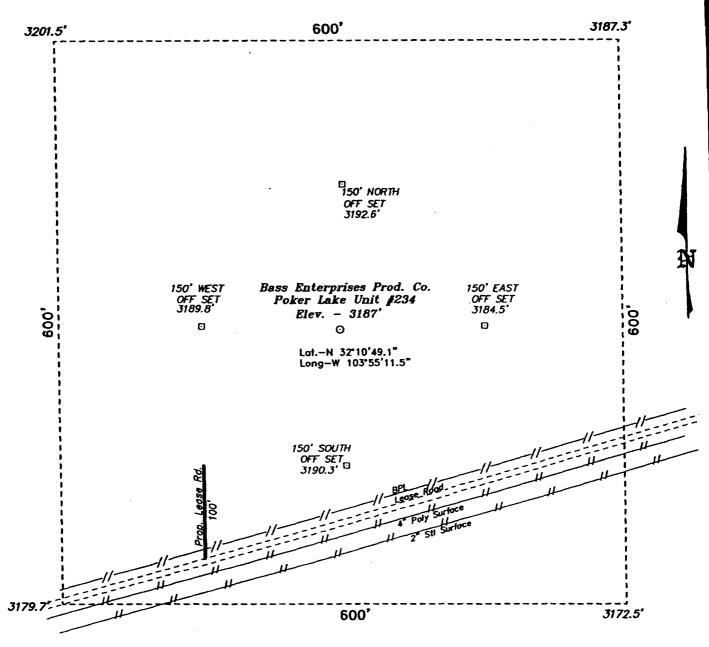
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT IV

Santa Fe, New Mexico 87504-2088

ISTRICT IV 40 South Pachece,	Samta Pe, N	M 87505		Santa F	e, New	Mexic	o 87504-2088		AMENDED	REPOR
		1	WELL LO	CATION	AND A	CREA	GE DEDICATION	ON PLAT		
API	Number		475	Pool Code 45		NASI	I DRAW - DELA	Pool Name		
Property 0 001796					Prope OKER I	rty Nam			Well No	
OGRID No.),		RASS		Орега	tor Nam		ANY	Elevat 318	ion
001001		<u> 1</u>		LIVILIVI	Surfac		·			
JL or lot No.	Section	Township	Range	Lot ldn	Feet from	m the	North/South line	Feet from the	East/West line	Coun
В	31	24 S	30 E	<u> </u>	33	0	NORTH	2400	EAST	EDI
			Bottom	Hole Lo	cation l	f Diffe	erent From Sur	face		
L or lot No.	Section	Township	Range	Lot ldn	Feet from	m the	North/South line	Feet from the	East/West line	Coun
Dedicated Acre	s Joint	or infill Co	noidation	Code Or	der No.		<u> </u>			L
LOT 2 40.61 ACRES	•	81.32	3201.5' 3179.7 ACRES		3187.3 171.5: 32 18 49 A		62.34 ACRES	Signature Willia Printed Nam DiJ. D Title SURVEY	ie .	prometries to the solution of
LOT 4			ACDES				62 SE ACDES	on this plat userus supervison a correct to t	y that the well local was plotted from fiel i made by me or not that the same is he best of my bette RCH 12, 2005	d notes under true
40.53 ACRES		81.16	AUKES			1"	62.66 ACRES	Professiona	SEL MEXICO	

SECTION 31, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

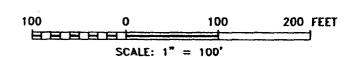


DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF STATE HWY 128 & CO. RD. 793 GO SOUTH ON 793 FOR APPROX. 4.0 MILES TO LEASE ROAD, THEN EAST ON LEASE ROAD FOR 0.25 MILES; THEN SOUTH 0.9 MILES, THENCE EAST 0.3 MILES, THENCE SOUTHERLY APPROX 5.0 MILES, THENCE WESTERLY FOR 1.2 MILES TO CO RD. 748, THENCE COUTHEASTERLY FOR APPROX. 2.1 MILES TO LEASE ROAD, THENCE WESTERLY FOR 0.4 MILES TO PROPOSED LOCATION.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 5162 Drawn By: K. GOAD



BASS ENTERPRISES PRODUCTION CO.

THE POKER LAKE UNIT No. 234 / Well Pad Topo
THE POKER LAKE UNIT No. 234 LOCATED 330' FROM
THE NORTH LINE AND 2400' FROM THE EAST LINE OF
SECTION 31, TOWNSHIP 24 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO

EIGHT POINT DRILLING PROGRAM BASS ENTERPRISES PRODUCTION CO.

NAME OF WELL: Poker Lake Unit #234

LEGAL DESCRIPTION - SURFACE: 330' FNL & 2400' FEL, Section 31, T-24-S, R-30-E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3207' (est)

GL 3187'

FORMATION	ESTIMATED TOP FROM KB	ESTIMATED SUBSEA TOP	BEARING
T/Rustler	7'	+3200'	Barren
T/Salt	397'	+2810'	Barren
T/Ramsey Sand	3497'	-290'	Oil/Gas
T/Lwr Brushy Canyon "8" A	7007'	-3800'	Oil/Gas
T/Bone Spring	7282'	-4075'	Oil/Gas
TD	7600'	-4393'	

POINT 3: CASING PROGRAM

*	TYPE 16" 11-3/4", 42#,H-40, ST&C 8-5/8", 32#, J-55, LT&C 5-1/2", 15.5#, J-55, LT&C	WITNESS	INTERVALS 0'- 40' 0'- 390' 0'- 3460' 0'-6300'	PURPOSE Conductor Surface Intermediate Production	CONDITION Contractor Discretion New New New ★ New
	5-1/2", 17#, J-55, LT&C		6300' -7600'	Production	New

^{*}If there is no flowing sand or Loss Circulation this string will not be run.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nippled up on the surface casing head and on the intermediate casing head. The BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. when rigged up on the surface casing will be hydro-tested to 70% of internal yield pressure of casing or 1000 psig whichever is less with the rig pump. If the BOP stack, etc. is rigged up on the intermediate casing spool all equipment will be tested to 3000 sig by independent tester. In addition to the high pressure test, a low pressure (200 psi) test will be required.

These tests will be performed:

- a) Upon installation
- b) After any component changes
- c) Fifteen days after a previous test
- d) As required by well conditions

A function test to insure that the preventers are operating correctly will be performed on each trip.



POINT 5: MUD PROGRAM

DEPTH	MUD TYPE	<u>WEIGHT</u>	<u>FV</u>	<u>PV</u> _	<u>YP_</u>	FL	<u>Ph</u>
0' - 390'	FW Spud Mud	8.5 - 9.2	38-70	NC	NC	NC	10.0 WITNESS
390' - 3460'	Brine Water	9.8 -10.2	28-30	NC	NC	NC	9.5 - 10.5**
3460' - 6000'	FW/Gel	8.8 - 9.2	30-34	NC	NC	NC	9.5 ~ 10.5**
6000' - 6900'	FW/Gel/Starch	8.8 - 9.2	30-34	8	2	<100 cc	9.5 - 10.5**
6900' - TD	FW/Gel/Starch	8.8 - 9.2	30-34	8	2	<25 cc	9.5 - 10.5**

^{**} If there is no intermediate casing set @ 3560', the drilling fluid will be 10 ppg BW to 5600' where it will be converted to BW/Diesel with properties as follows: 8.8 - 9 ppg, 32 - 40 funnel secs vis, YP2, PV 8, FL 25 cc or less, Ph 9.5 - 10.

NOTE: May increase vis for logging purposes only.

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING

GR-CNL-LDT-AIT from TD to base of Salt (+/- 3300'). GR-CNL-CAL from base of Salt to surface.

C) CONVENTIONAL CORING

None anticipated.

D) CEMENT

INTERVAL SURFACE: Lead 0 – 390' (100% excess circ to surface)	AMOUNT SXS	FT OF FILL 390	Prem Plus + 2% CaCl ₂ + 1/# Flocele	<u>GALS/SX</u> 6.33	<u>PPG</u> 14.8	FT ³ /SX 1.35		
INTERMEDIATE: Lead 0' – 3160' (200% excess)	1050	3160	Interfill C	14.11	11.9	2.45		
Tail 3160' 3460' (200% excess)	200	300	Prem Plus + 2% CaCl ₂	6.37	14.8	1.35		
PRODUCTION:							Nitrogen	COMPRESSIVE Strength
Base Slurry w/nitrogen 2997-7600' (50% excess)	775	4603	Premium Plus + 2% Zone Sealant 2000	6.76 9.1	-14.5	2.3-1.39	300/600 scf/bbl	1200

E) DIRECTIONAL DRILLING

No directional services anticipated.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Delaware section. A BHP of 3285 psi (max) or MWE of 8.7 ppg is expected. Lost circulation may exist in the Delaware Section from 3497-7600'. No H_sS is anticipated.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

Upon approval

12 days drilling operations

14 days completion operations

GEG/cdg April 15, 2005 Surface casing to be set into the Rustler below all fresh water sands.

Production casing will be cemented using Zone Seal cement.

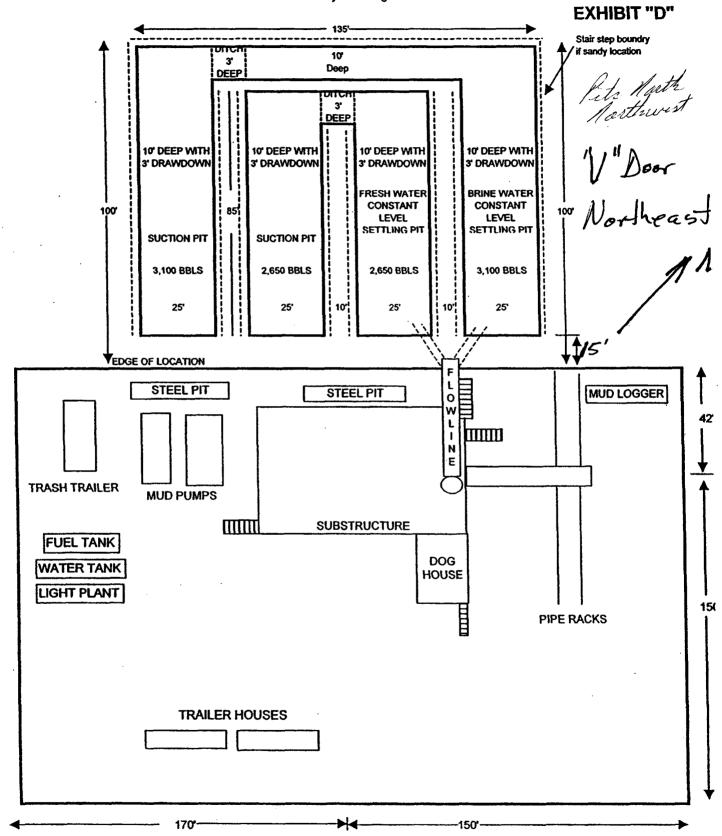
Drilling Procedure, BOP Diagram, Anticipated tops and surface plans attached.

This well is located outside the Secretary 's Potash area and outside the R-111 Potash area. There are no potash leases within 1 mile of the location.

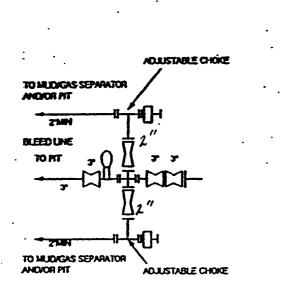
This is an unorthodox location.

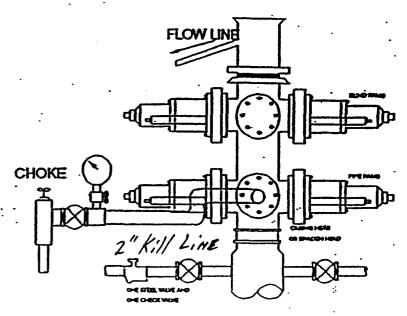
BASS ENTERPRISES PRODUCTION COMPANY

Poker Lake Unit #216 # 234 Grey Wolf Rig 15 ar 5/9/07



2000 PSI WP





THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- A. One double gate blowout preventer with lower rams for pipe and upper rams blind, all hydraulically controlled.
- B. Opening on preventers between rams to be flanged, studded or clamped and at least two inches in diameter.
- C. All connections from operating manifold to preventers to be all steel hose or tube a minimum of one inch in diameter.
- D. The available closing pressure shall be at least 15% in excess of that required with sufficient volume to operate (close, open, and re-close) the preventers.
- E. All connections to and from preventers to have a pressure rating equivalent to that of the BOP's.
- F. Manual controls to be installed before drilling cement plug.
- G. Valve to control flow through drill pipe to be located on rig floor.
- H. All chokes will be adjustable. Choke spool may be used between rams.

MULTI-POINT SURFACE USE PLAN

NAME OF WELL: Poker Lake Unit #234

LEGAL DESCRIPTION - SURFACE: 330 FNL & 2400' FEL, Section 31, T-24-S, R-30-E, Eddy County, New Mexico.

POINT 1: EXISTING ROADS

A) Proposed Well Site Location:

See Exhibit A and Survey Plats

B) Existing Roads:

From Carlsbad, New Mexico, go 8 miles south on Highway 285 to Highway 31. Turn north and go 7 miles on Highway 31. Turn east on Highway 128 and go 4 miles to Rawhide Road (located between mile markers 4 and 5). Go south for 7 miles to lease road, then east for 0.25 mile, then south 0.9 miles, then east 0.3 mile, then southeasterly for 5 miles, then westerly for 1.2 miles to Co. Road 748, then southeasterly for approximately 2.1 miles to lease road, then westerly for 0.4 miles to proposed location.

C) Existing Road Maintenance or Improvement Plan:

See Exhibit B and Survey Plats.

POINT 2: NEW PLANNED ACCESS ROUTE

A) Route Location:

Approximately 100' of new road is required.

B) Width

12'

C) Maximum Grade

Grade to match existing topography or as per BLM requirements.

D) Turnout Ditches

Spaced per BLM requirements.

E) Culverts, Cattle Guards, and Surfacing Equipment

If required, culverts and cattle guards will be set per BLM Specs.

POINT 3: LOCATION OF EXISTING WELLS

Exhibit A indicates existing wells within the surrounding area.

A) No existing facilities are located within one mile which are owned or controlled by lessee/operator:

Closest Oil/Gas production facilities are located at Poker Lake Unit #158 & Poker Lake Unit #213 wellsites. Poker Lake Unit #213 is located 2 ¼ miles north of proposed well, Poker Lake Unit #158 is located 3 ¾ miles north of proposed well.

B) New Facilities in the Event of Production:

New production facilities will be built at Poker Lake Unit #227 (SE/SE Section 30, T24S, R30E) and will be used via flowlines. Additional separators/treaters will be added as necessary. A new flowline consisting of 2-7/8" steel pipe will be laid within 50' of the center line of the access road and existing roads which have previously been Arch cleared.

C) Rehabilitation of Disturbed Areas Unnecessary for Production:

Following flowline construction, those access areas required for continued production will be graded to provide drainage and minimize erosion. The areas unnecessary for use will be graded to blend in with the surrounding topography (see Point 10)

POINT 5: LOCATION AND TYPE OF WATER SUPPLY

A) Location and Type of Water Supply

Fresh water will be hauled from Johnson Station 50 miles east of Carlsbad, New Mexico or other commercial facilities. Brine water will be hauled from commercial facilities.

B) Water Transportation System

Water hauling to the location will be over the existing and proposed roads.

POINT 6: SOURCE OF CONSTRUCTION MATERIALS

A) Materials

Exhibit B shows location of caliche source.

B) Land Ownership

Federally Owned.

C) Materials Foreign to the Site

No construction materials foreign to this area are anticipated for this drill site.

D) Access Roads

See Exhibit B.

A) Cuttings

Cuttings will be contained in the reserve pit.

B) Drilling Fluids

Drilling fluids will be contained in the reserve pit.

C) Produced Fluids

Water production will be contained in the reserve pit.

Hydrocarbon fluid or other fluids that may be produced during testing will be retained in test tanks. Prior to cleanup operations, any hydrocarbon material in the reserve pit will be removed by skimming or burning as the situation would dictate.

D) Sewage

Current laws and regulations pertaining to the disposal of human waste will be complied with.

E) Garbage

Portable containers will be utilized for garbage disposal during the drilling of this well.

F) Cleanup of Well Site

Upon release of the drilling rig, the surface of the drilling pad will be graded to accommodate a completion rig if electric log analysis indicate potential productive zones. The reserve pit will be fenced and bird netted. The fence will be maintained until the pit is backfilled. Reasonable cleanup will be performed prior to the final restoration of the site.

POINT 8: ANCILLARY FACILITIES

None required.

POINT 9: WELL SITE LAYOUT

A) Rig Orientation and Layout

Exhibit "D" shows the dimensions of the well pad and reserve pits, and the location of major rig components. Only minor leveling of the well site will be required. No significant cuts or fills will be necessary.

POINT 9: WELL SITE LAYOUT - Cont'd ...

B) Locations of Pits and Access Road

See Exhibits "B", "C" & "D".

C) Lining of the Pits

The reserve pit will be lined with plastic.

POINT 10: PLANS FOR RESTORATION OF THE SURFACE

A) Reserve Pit Cleanup

The pits will be fenced immediately after construction and shall be maintained until they are backfilled. Previous to backfill operations, any hydrocarbon material on the pits' surfaces shall be removed. The fluids and solids contained in the pits shall be backfilled with soil excavated from the site and soil adjacent to the reserve pits. The restored surface of the pits shall be contoured to prevent impoundment of surface water flow. Water-bars will be constructed as needed to prevent excessive erosion. Topsoil, as available, shall be placed over the restored surface in a uniform layer. The area will be seeded according to the Bureau of Land Management stipulations during the appropriate season following restoration.

B) Restoration Plans - Production Developed

The reserve pits will be backfilled and restored as described above under Item A. In addition, those areas not required for production will be graded to blend with the surrounding topography. Topsoil, as available, will be placed upon those areas and seeded. The portion of the site required for production will be graded to minimize erosion and provide access during inclement conditions. Following depletion and abandonment of the site, restoration procedures will be those that follow under Item C.

C) Restoration Plans - No Production Developed

The reserve pits will be restored as described above. With no production developed, the entire surface disturbed by construction of the well site will be restored. The site will be contoured to blend with the surrounding topography and provide drainage of surface water. The topsoil, as available, shall be replaced in a uniform layer and seeded according to the Bureau of Land Management's stipulations.

D) Rehabilitation's Timetable

Upon completion of drilling operations, the initial cleanup of the site will be performed as soon as weather and site conditions allow economic execution of the work.

A) Terrain

Relatively flat.

B) Soil

Caliche and sand.

C) Vegetation

Sparse, primarily grasses and mesquite with very little grass.

D) Surface Use

Primarily grazing.

E) Surface Water

There are no ponds, lakes, streams or rivers within several miles of the wellsite.

F) Water Wells

There is one water wells located within 1-1/2 miles of the proposed well. This well is approximately 6400' North of the proposed well.

G) Residences and Buildings

None in the immediate vicinity.

H) Historical Sites

None observed.

I) Archeological Resources

An archeological survey will be obtained for this area. Before any construction begins, a full and complete archeological survey will be submitted to the Bureau of Land Management. Any location or construction conflicts will be resolved before construction begins.

J) Surface Ownership

The well site is on federally owned land.

- K) Well signs will be posted at the drilling site.
- L) Open Pits

All pits containing liquid or mud will be fenced and bird-netted.

POINT 12: OPERATOR'S FIELD REPRESENTATIVE

Page 6

(Field personnel responsible for compliance with development plan for surface use).

DRILLING

William R. Dannels

Box 2760

Midland, Texas 79702

(432) 683-2277

PRODUCTION

Mike Waygood

3104 East Green Street

Carlsbad, New Mexico 88220

(505) 887-7329

Kent A. Adams

Box 2760

Midland, Texas 79702

(432) 683-2277

POINT 13: CERTIFICATION

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Bass Enterprises Production Co. and it's contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

5-2-05

Date

GEG/cdg

William R. Dannels

Conditions of Approval Cave and Karst

EA#: NM-080-07-0722 Lease #: LC-069627A BEPCO, L.P. Poker Lake Unit #234 RESUBMITTAL

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Casing:

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cavebearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:

Any blasting will be a phased and time delayed.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Pressure Tests:

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Differential Shut-off Systems:

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

BEPCO, LP

Well Name & No.

Poker Lake Unit # 234

Location:

330'FNL, 2400'FEL, SEC31, T24S, R30E, Eddy County, NM

Lease:

LC-069627-A

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance, at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County, in sufficient time for a representative to witness:

- 1. Spudding
- 2. Cementing casing: 16 inch, 11.75 inch, 8.625 inch, 5.5 inch
- 3. BOP tests
- B. A Hydrogen Sulfide (H2S) Drilling Plan is N/A.
- C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- D. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.
- E. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

- A. The 11.75 inch surface casing shall be set above the salt, at least 25 feet into the Rustler Anhydrite @ approximately 390 feet and cement circulated to the surface.
 - 1. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - 2. Wait on Cement (WOC) time for a primary cement job will be a minimum of 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, which ever is greater. (This is to include the lead cement)
 - 3. WOC time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds of compression strength, which ever is greater.
 - 4. If cement falls back, Remedial cementing shall be completed prior to drilling out that string.
- B. The minimum required fill of cement behind the <u>8.625</u> inch intermediate casing is <u>circulate cement to</u> <u>the surface</u>. If cement does not circulate see A.1 thru 4.
- C. The minimum required fill of cement behind the <u>5.5</u> inch production casing is <u>cement shall extend</u> <u>upward a minimum of 400 feet above the base of the intermediate casing string.</u>
- D. If hard band drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>11.75</u> inch casing shall be <u>2000</u> psi.
- C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- 1. The tests shall be done by an independent service company.
- 2. The results of the test shall be reported to the appropriate BLM office.
- 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of the independent service company test will be submitted to the appropriate BLM office.
- 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if the test is done with a test plug and 30 minutes without a test plug.
- 5. A variance to test the <u>BOP and BOPE nippled up on 11.75 inch casing</u> to the reduced pressure of <u>1000</u> psi with the rig pumps is approved. The BOP/BOPE must be tested by an independent service company.

IV. Hazards:

- 1. Our geologist has indicated that there is High Cave / Karst potential.
- 2. Our geologist has indicated that there is potential for lost circulation in the Delaware and Bone Springs,

Engineering may be contacted at 505-706-2779 for variances if necessary.

FWright 4/24/07